

**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES
MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

1. (Canceled)
2. (Canceled)
3. (Currently amended) The optical sensor as claimed in claim [[1]] 4, further comprising ~~a sensor shaft, and~~ a sensor flange supported by the sensor shaft via the bearing, wherein the ~~ferrofluid seal includes a magnet which is~~ magnetized axially and has opposite end faces, two of said flux guide elements element disposed respectively at the end faces for defining two of said sealing gap for[[,]] and a ferrofluid liquid, ~~for producing a seal between the sensor flange and the sensor shaft.~~
4. (Currently amended) An optical sensor for an electrical machine, comprising:
 - a sensor shaft defining an axis;
 - a bearing for support of the sensor shaft;
 - a coding disk disposed on the sensor shaft at a distance to the bearing;
 - and
 - a ferrofluid seal disposed between the bearing and the coding disk to prevent lubricant from migrating from the bearing toward the coding disk, said ferrofluid seal including ferrofluid liquid aligning in a sealing gap between the sensor shaft and a confronting end of a flux guide element of the ferrofluid seal.
5. (Previously presented) The optical sensor as claimed in claim 4 wherein the bearing is constructed to support the sensor shaft without play.

6. (Currently amended) The optical sensor as claimed in claim 4, wherein the ferrofluid seal includes a magnet which is magnetized in axial direction so as to generate a magnetic field which is closed via the sensor shaft to effect the alignment of the ferrofluid liquid, [[a]] said flux guide element disposed at one end face of the magnet, ~~and a ferrofluid ring disposed between the flux guide element and an outer surface of the sensor shaft.~~
7. (Canceled)
8. (Canceled)